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ABSTRACT

Two experiments were conducted to examine self-fulfilling expectancy influence in a simulated supervisor-worker interaction. The first experiment led supervisor subjects to expect either high or low compliance from their workers. All workers completed a set of five tasks twice, once when instructed to work fast and once when instructed to work accurately. Speed and accuracy of worker performance was measured, as was the frequency of supervisors' repetition of work instructions. Results indicated that expectancy influence was found only when workers were told to work fast on the first completion of the tasks, and that high-compliance expectation supervisors repeated work instructions more frequently than low-compliance expectation supervisors. A second experiment failed to replicate the successful expectancy effects found in the first. However, results from the second experiment did confirm and extend earlier findings with respect to the cueing of expectations by supervisors, and the apparent awareness of these cues by workers. These two studies were interpreted to indicate that expectancy influence is fragile and difficult to demonstrate. They focus attention on the recipient of an expectancy communication, and they point toward overt mediation of expectations. (Author)

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Transmission of and Compliance with Expectations in a Simulated Supervisor-Worker Interaction

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The "self-fulfilling prophecy" or "expectancy effect" phenomenon is one of the most intuitively appealing and, at the same time, potentially disturbing findings of modern social psychology (Rosenthal & Fode, 1963 a, b; Rosenthal & Jacobson, 1968; Skilbeck, 1975). Based upon a decade of active research with this phenomenon, Robert Rosenthal's general conclusions are that the holders of behavioral expectations for another subtly, covertly, and unintentionally communicate their expectations, and that these expectations, in turn, act to produce the expected behavior (Rosenthal, 1973). Thus a teacher with low expectations for a child may be less warm, encouraging, and patient, and more critical, than with other children about whom more positive expectations are held. Similarly, a manager may set minimally challenging goals and provide low levels of encouragement for staff expected to produce little. In both instances, the behavioral manifestations of the expectations may produce self-fulfilling compliance on the part of those about whom the expectations are held. This process has also been called the "Pygmalion effect" from the myth of the ancient Greek sculptor, Pygmalion, who fell in love with his own statue of the beautiful Galatea. His love for the statue proved to be so strong and unchangable that the gods granted it life. The Pygmalion metaphor, in which the desire creates the reality, has been used to explain expectancy influence, as well as to describe it.

Self-fulfilling expectancy effects were originally studied in the domain of social science experimentation (Rosenthal, 1966, 1969), but they have been implicated subsequently in many other areas of social communication, including

education (Brophy & Good, 1972; Rosenthal & Jacobson, 1968), psychotherapy (Goldstein, 1962; Wilkins, 1973), and social welfare (deMontigny, 1973; Gurin & Gurin, 1970). If this phenomenon is, indeed, as general and subtle as Rosenthal and his supporters believe, it would have enormous theoretical and practical implications. One such implication would be that self-defeating behavior among the poor, the criminal, and the underachieving can be reduced by sensitizing social communicators to the damage of their negative expectations. Interventions which increase positive expectations in teachers, managers, psychotherapists, and other professionals would constitute an easy and effective solution to previously intractable problems. However, several critical aspects of expectancy influence remain unclear. Attempts to replicate positive findings have often proven unsuccessful (e.g., Barber, Calverley, Forgione, McPeake, Chaves, & Bowen, 1969; Claiborn, 1969). These failures to replicate raise the question of the range of social ecologies in which the effect will be found reliably. And second, the mechanisms by which the effect is mediated are unclear (Chaikin, Sigler, & Derlega, 1974; Rosenthal, 1973; Rothbart, Dalfen, & Barrett, 1971; Rubovitz & Maehr, 1971).

The present research was designed to deal with these two issues. First, it sought to identify an experimental procedure which would be conducive to the demonstration of expectational influence within a simulated supervisor-worker interaction. And second, it sought to examine, within this setting, how expectancy communication is mediated.

EXPERIMENT I

Procedure for Experiment I

The first experiment employed 56 pairs of UCLA undergraduate volunteers, 14 per condition, who received partial course credit for their participation in the experiment. Same-sex pairs of subjects only were used in order to

minimize sex-role factors. The experimental room permitted the monitoring of subjects by means of a one-way mirror and a concealed microphone.

The experiment used five short tasks.[1] Pilot work with these tasks had demonstrated that the accuracy and speed with which the task are completed depend in large measure upon whether task instructions emphasize accuracy or speed: When work instructions emphasize speed, accuracy goes down, and when they emphasize accuracy, speed decreases.

Subjects reported for the experiment in pairs and were seated across from one another, separated by a table. They then read the general experimental instructions which were on the table. These instructions identified one subject as "Supervisor" over the other, who was to be the "Worker." The cover explanation for the experiment indicated that we were interested in the influence of self-instruction versus other-instruction on task performance. Thus subjects perceived that the Worker was the focus of the study, while actually the study was equally concerned with the Supervisor and how he influenced the Worker's performance.

All Workers received identical instructions, telling them to complete the five tasks according to the instructions to be read to them by their Supervisors. All Supervisors received the same, vague general description of their duties. They were to read the task instructions to the Worker and see that the Worker followed them; they were also told that they were free to re-read the Worker's instructions at any time. When the Worker had completed all five tasks under one set of task instructions, the Supervisors were to give new task instructions and the Worker was to complete the same tasks a second time.

At this point the major independent variable, that of the Supervisor's expectations about the Worker's compliance with task instructions, was intro-

duced. In the Low-compliance expectation condition, the Supervisor was told that performance on the tasks usually is much the same, no matter what the work instructions emphasize; whether Workers were instructed to work fast or to work accurately, they could be expected to work at much the same speed and level of accuracy. Thus the Low-compliance Supervisors were led to expect little compliance with the Worker's task instructions. In the High-compliance expectation condition, the Supervisor was told that performance on the tasks usually follows the emphasis of the work instructions; when Workers were instructed to work fast, they could be expected to work quickly but inaccurately, and when told to work accurately, they could be expected to work accurately but slowly. Thus the High-compliance Supervisors were led to expect high compliance with the Worker's task instructions.

Supervisors then administered the five tasks in a fixed order, twice, once after telling the Worker to work as fast as possible, ignoring errors, and once after telling the Worker to work as accurately as possible, ignoring how long it took. The seating of subjects as worker or supervisor, the expectation condition, and the order in which the fast/accurate instructions were given were all randomly varied. The experimenter recorded from the observation room how long the Worker spent in completing each task; errors were counted later from the completed tasks. The fifth task, the Loop Task, was not paper-pencil, and thus it was attached to a microsecond timer in order to record an "error" rate consisting of the percentage of the total time during which the ring and the pole were in contact. The experimenter also recorded instances of several categories of Supervisor behavior which might mediate communication of Supervisor expectations.

When the tasks had been completed, the experimenter re-entered the room and distributed a post-experimental questionnaire. Questionnaire items

included a check on how the Supervisor actually expected his Worker to perform, and assessed what both Worker and Supervisor believed to be the true purposes of the experiment; none of the subjects indicated an awareness of its true purposes. And finally, subjects were thoroughly debriefed.

Results and Discussion of Experiment I

Manipulation Check and Worker Compliance with Supervisor Expectations.

Insert Tables 1-3 about here

Table 1 shows the number of seconds, and the number of errors, for each task in each condition. Overall indexes of Worker performance were computed as sums using transformed data to correct for skewness and mean-variance proportionality. Table 2 presents a summary of the analysis of variance results. The manipulation check, the Supervisor's self-reported expectation, was analyzed first. As Table 2 shows, this showed a highly significant main effect for "Expectation," and no interactions. Inspection of the means indicated that Supervisors in the high compliance condition reported expecting significantly greater compliance than Supervisors in the low compliance condition. Next, two overall three-way repeated measure analyses of variance were computed for the time and error indexes. The "expectancy effect" prediction in these analyses was tested by the three-way interaction. This F was not significant for either measure, indicating that our major prediction of an overall expectancy effect was not confirmed. However, both of the overall ANOVA's indicated a trend of about $p = .10$ toward an Expectation X Block interaction. This suggested the need for separate analyses of the data by Block. Block II again showed no significant effect, but Block I indicated

(the Expectation X Order term in Table 2) a significant expectancy effect for the time index, and a trend ($p < .10$) in that direction for the error index. Inspection of the means showed that these differences were due largely to the "fast" work instruction.

These results suggest that Supervisor expectations influenced Workers' performance only on the first run through the tasks (i.e., Block I), and even then only when Workers were instructed to work fast rather than accurately. The expectancy effect seemed to be much more specific and limited than we had anticipated.

Mediation. The analyses turned next to the ratings of Supervisor behavior, in an effort to identify Supervisor-emitted behavioral cues which would serve to transmit their expectations. Table 2 shows that high-compliance expectation Supervisors repeated Worther task instructions significantly more often than low-compliance expectation Supervisors. This was consistent with our prediction regarding mediation: One easy way to obtain compliance would seem to be to be sure that the Worker knows exactly what you expect him to do, and to repeat these instructions whenever he deviates from them. Repetition of instructions emphasizes them, and ought to increase the likelihood that they will be followed. Other Supervisor behaviors--such as the frequency of distracting the Worker, and making corrections/suggestions about how to work--were not systematically different for the two expectation conditions. Finally, correlations were computed between Worker performance measures and the strength of the Supervisor's expectation of obtaining compliance, and between performance measures and Workers' ratings of how much they depended upon their task instructions. Table 3 presents these results. They indicate that the strength of the Supervisor's expectation was significantly

related to actual Worker compliance, but not to how much Workers perceived themselves to be dependent upon work instructions.

The results regarding the repetition of work instructions more by high than low compliance Supervisors suggests that Supervisors were attempting to transmit their expectations, even though these repetitions were of only limited success in influencing actual Worker performance. It is not clear why the expectancy effect should have occurred only for the first Block, although some of the studies reviewed by Rosenthal (1969) have reported a similar pattern. In considering why the "fast" task instruction worked better in producing an expectancy effect than the "accurate" one, it seemed possible that our undergraduate subjects assume the need to work accurately; quality is a more prized academic skill than quantity. The instructions to work accurately, then, may have led to maximally accurate work levels which were impermeable to the effects of Supervisor expectations. The "fast" instruction is a bit more counter-intuitive, and thus Workers in this condition may have looked to their Supervisors more for indications regarding how they "really" should work. This reasoning suggests that expectancy effects are most likely when the communication or the relationship is an ambiguous or counter-intuitive one.

However, these results required replication before any meaningful interpretation of them could be made. Replication was particularly indicated because the planned overall analyses had not reached acceptable levels of significance, and the subsequent analyses were based upon trend findings or post hoc comparisons. Thus a second experiment was designed to attempt to replicate the interesting aspects of Experiment I.

EXPERIMENT II

Procedure for Experiment II

The second experiment employed 36 same-sex pairs of UCLA undergraduates, 12 per condition, as before. The procedure of the first experiment was retained with the following modifications. First, all subjects completed the set of tasks only once, to parallel Block I of the first experiment. Second, all subjects were instructed to work as fast as possible, ignoring accuracy, to parallel the "fast" instruction of the first experiment. Third, the Symbol Substitution Task was eliminated to save time and because, even under the fast instruction of Experiment I, it produced uniformly few errors and thus appeared to be hitting an accuracy "ceiling." Fourth, a no-expectation control group was added to help guage the impact of Supervisor expectations relative to a no-expectation condition. Fifth, the mediation categories of Supervisor behavior to be rated were changed and increased. And sixth, the manipulation check on the expectation variable was conducted before, rather than after, the completion of the tasks.

Results and Discussion of Experiment II

Manipulation Check and Worker Compliance with Supervisor Expectations.

Insert Tables 4-7 about here

Table 4 presents means and standard deviations for time and error measures on each task in each condition. Overall indexes of Worker performance were again computed as sums using transformed data. Analysis of the Supervisors' self-reported expectations, the manipulation check, by analysis of variance showed the predicted significant effect (Table 5), and t-test on these means (Table 6) confirmed that each of the tree expectancy conditions differed from one another in the predicted direction.

Analyses of variance on the indexes of Worker performance (Table 5),

however, showed none of the predicted patterns which had characterized the first experiment. There were no significant or trend effect for either the time or error indexes, and the direction of the means was generally opposed to predictions based upon the earlier results. Thus the major prediction of the replication attempt failed to find any support.

Mediation and Worker Awareness of Mediation. Analyses of measures of Supervisor behavior showed (Tables 5-7) that high-compliance expectation Supervisors did behave differently than low-compliance ones. As before, high-compliance Supervisors repeated Worker instructions significantly more often than low-complaince ones. In addition, observation room raters rated high-compliance Supervisors as significantly more attentive to their Workers than low-complaince ones. In short, it seemed that high-compliance expectation Supervisors were doing the sorts of things--repeating instructions, attending to their Workers--which were likely to promote compliance with these expectations. Thus they seemed to be "transmitting" appropriate cues regarding their expectations.

Analyses of the Workers' responses to the post-task questionnaire suggested that Workers were aware of some of the Supervisor behaviors which transmitted expectations (Tables 5-7). First, Workers with high-compliance expectation Supervisors rated those Supervisors as significantly more directive than low-compliance ones. Second, there was a highly significant correlation between Worker ratings of Supervisor directiveness and the frequency of Supervisor repetition of task instructions, and a marginally significant correlation between Worker ratings of Supervisor directiveness and Worker ratings of Supervisor attentiveness. These results indicate that Workers were aware of several expectation-cuing behaviors on the part of their Supervisors,

and thus seemed to be "receiving" the expectancy cues "transmitted" by their Supervisors. Previously discussed results regarding Worker performance, however, show that despite the apparent transmission and reception of Supervisor expectations, Workers failed to comply with them.

GENERAL DISCUSSION

The results from Experiment I suggested that an expectancy effect had occurred in part of this study, but the attempt to replicate this effect in Experiment II failed. At this point, chance statistical variation stands as perhaps the most plausible explanation for the apparent expectancy effect found in the first study. Of course, the particular variables measured or even the paradigm itself may have been unfortunate choices for the demonstration of supervisor-worker expectancy influence. However, both experiments did show that performance on the tasks selected was highly sensitive to work instructions, and thus, that there was considerable latitude in which expectancy influence might have occurred. Further, both studies showed Supervisor behavior which appeared to cue their expectations. Therefore, if we work on the assumption that the results from both studies are meaningful, a number of conclusions emerge.

First, compliance expectations would seem not to be an important contributor to worker performance as measured in these studies, and expectancy effects in this setting are highly dependent upon non-obvious contextual factors. Thus the assumption throughout education, management, psychotherapy, and social welfare that communication of negative expectations is a pervasive and powerful determinant of negative behavior may be wrong. A careful reading of the Results sections of the expectancy literature supports this conclusion (Barber, et al., 1969; Claiborn, 1969; Skilbeck, 1975). Rosenthal himself has

recently (1973) cited a figure of 84 known successful demonstrations of expectancy influence, an impressive figure. But these successes are out of a total of 242 known attempts to demonstrate the effect. This is about the same ratio of successes to failures reached by Barber and Silver (1968) in their examination of experimenter bias studies, and matches well with the similarly low "hit rate" indicated by Wilkins (1973) in his recent review of psychotherapy expectancy studies. Thus from several relatively independent directions we are converging on the conclusion that expectancy communication is difficult to demonstrate, and may be a rare and fragile feature of social interactions.

The view that expectancy effects are a weak and rare, rather than a robust and pervasive, aspect of social interactions implies that future research in this area needs to be attentive to the specification of social ecologies in which the effect will be found. The effect has been demonstrated across a range of diverse kinds of interactions, although inconsistently. Researchers up to now have acted rather like naive fishermen might, optimistically casting for expectancy effects wherever fancy and the drift of the boat takes them. Apparently expectancy effects, like fish, just are not going to be found everywhere. To catch either one, we need to consider carefully where the best fishing holes are to be found. In the present paradigm, for example, the effect may emerge only when supervisor and worker status differences are real, rather than arbitrarily assigned.

The view that expectancy effects are the exception and not the rule also implies that difficult social and industrial problems are not going to be solved simply by modifying negative expectations. The persistent problems of the poor, the criminal, the underachieving, and the emotionally troubled are not

likely to dissolve simply by modifying the expectations of social communicators. However, the present data may hit at how expectancy effects can be important in understanding and alleviating these problems. The data, and particularly that of the second study, suggest that the "sending" and perhaps even the "receiving" of the Supervisor's expectations occurred successfully. Worker performance did not reflect Supervisor expectations because the Workers apparently chose not to comply with those expectations.

Social psychologists have concentrated their attention largely on the sending and the sender of social communications, rather than on the receiver. The success of an expectancy communication seems to be assumed once it has been correctly sent and received, a position perhaps epitomized by Martin Orne (1962) in his discussion of the demand characteristics of an experiment. Clinical psychologists, on the other hand, have concentrated their attention on idiosyncratic responses to communications, including such reations as resistance, passive aggressiveness, and negativism. This position suggests that the "power" to complete expectancy communication lies as much with the receiver of the communication as with its sender; the data of the present experiments supports this position. Perhaps those concerned with "real life" expectancy communication need to use ideas originally evolved in clinical studies to understand when an expectation will be complied with, and when it will be ignored or resisted. During debriefing a Worker who had ignored a particularly attentive and persistent Supervisor explained that he simply did not like to be "bossed around," and so deliberately did the opposite of what he was told. It would be helpful to know when these "oppositional" reactions will be triggered, and when expectancy communication will produce acquiescence. This endeavor will need to examine the recipient of the communication as well

as the sender. Expectancy communication may be self-fulfilling only when it is congruent with the communication's receiver, and sustaining the sending of positive expectations may require an appropriate response from those about whom expectations are held. Strategies to sustain positive expectations and to transmit them in maximally facilitative ways require development, and this development, in turn, will need to recognize the reciprocal nature of the expectancy communication process.

And finally, future research needs to investigate overt styles of influence which may mediate expectancy influence. Direct verbal communication of expectations, cheating and recording errors by experimenters, and gross differences in teacher or manager attention need to be evaluated as potentially important aspects of expectancy mediation. Most previous research has tended to regard these overt styles as uninteresting artifacts of the "real"--that is, subtly mediated--expectancy phenomenon. Recognition of the legitimacy of overt mediation is overdue.

Given the problems and complexities in demonstrating expectancy effects, perhaps the metaphor of the faithful and constant Pygmalion is poorly chosen. A closer metaphor might be that of the Cheshire Cat, whose tantalizing grin remains even after his substance has slowly faded from view. Alternatively, one might choose the metaphor of the changeable Chameleon, who has proven to be highly sensitive to his environment, and changes even as his surroundings change--disappearing from the sight of all those who do not know exactly where to look to find him hiding.

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FOOTNOTES

1. The first task required a subject to fill in a page of small boxes with x's, trying not to let the x hit the sides of the box. The second task required a subject to draw a line between the thin walls of a maze, also without hitting the sides of the maze. The third task involved a symbol-symbol substitution problem, in which the subject had to fill in missing symbols according to a key provided at the top of the task. The fourth task presented the subject with two pages of random numbers, instructing him to cross out all 6's and 4's. The fifth task was a commercial game, in which the subject had to move a small metal ring down a twisted metal pole without touching the pole with the ring.

Table 1

Worker Task Performance, Experiment I

Block[a]	Order[b]	Expec	Draw X's Task Time $\bar{X}$	Draw X's Task Time S.D.	Draw X's Task Errors $\bar{X}$	Draw X's Task Errors S.D.	Mazes Task Time $\bar{X}$	Mazes Task Time S.D.	Mazes Task Errors $\bar{X}$	Mazes Task Errors S.D.	Symbol Substitution Task Time $\bar{X}$	Symbol Substitution Task Time S.D.	Symbol Substitution Task Errors $\bar{X}$	Symbol Substitution Task Errors S.D.
I	A-F	HI	216	46.7	47.2	50.9	124	46.2	1.0	0.8	147	43.8	0.7	0.26
		LO	216	47.0	21.7	19.7	112	35.7	1.7	2.8	140	29.1	0.0	0.0
	F-A	HI	145	17.6	116	50.9	34	16.8	45.5	37.3	110	14.4	1.1	2.4
		LO	156	23.7	77.4	46.9	46	18.1	23.3	30.9	118	21.6	0.4	0.7
II	A-F	HI	133	27.3	182.1	25.5	31	14.1	39.9	30.0	102	14.7	1.0	1.8
		LO	121	11.8	153	48.0	37	26.2	44.2	35.3	94	31.9	8.1	17.1
	F-A	HI	179	24.1	38	22.5	89	21.7	6.9	13.7	140	28.7	0.0	0.0
		LO	196	59.6	51	46.7	106	31.6	5.6	12.8	154	36.3	0.14	0.35

Block	Order	Expec	Number Cross-out Task Time $\bar{X}$	Number Cross-out Task Time S.D.	Number Cross-out Task Errors $\bar{X}$	Number Cross-out Task Errors S.D.	Loop Task Time $\bar{X}$	Loop Task Time S.D.	Loop Task Errors $\bar{X}$	Loop Task Errors S.D.	Time Index (Log Transform) $\bar{X}$	Time Index (Log Transform) S.D.	Error Index (Sqrt Transform) $\bar{X}$	Error Index (Sqrt Transform) S.D.
I	A-F	HI	524	88.7	6.4	3.5	73	38.6	18	15.6	25.5	1.0	20.1	8.9
		LO	448	76.4	8.0	6.7	57	29.7	18	6.9	25.0	0.8	16.9	7.3
	F-A	HI	301	107.0	112	261	13.9	8.1	62	20.3	21.1	1.4	49.2	23.8
		LO	371	119.7	16	15.6	27.0	17.4	40	20.2	22.4	1.3	33.1	8.8
II	A-F	HI	320	62.9	13	11.0	12.9	13.4	53	23.8	20.8	1.4	47.1	8.9
		LO	265	63.7	31	49.7	13.1	18.7	62	25.7	20.2	1.9	49.2	16.6
	F-A	HI	474	114.2	6.1	7.7	61.6	48.4	23	14.2	24.6	1.1	21.6	6.5
		LO	436	112.0	7.5	5.7	59.0	23.6	15	11.0	24.9	1.0	23.0	9.8

a. "Block" indicates whether the performance is from the first (I) or second (II) time through the tasks.

b. "Order" indicates the ordering of work instructions: Fast then accurate, or accurate then fast.

Table 2

Summary of 2-Way Analyses of Variance

Experiment I

Measure	Source	SS	DF	MS	F
Supervisor Expectation (Manipulation check)	Expectation	86664.3	1	86664.3	17.2***
	Order	9490.0	1	9490.0	1.9
	Expectation X Order	50.4	1	50.4	<1
	Subjects	262105.1	52	5040.5	
Time Index (Log) for Block I	Expectation	2.6	1	2.6	1.8
	Order	169.8	1	169.8	117.4***
	Expectation X Order	11.7	1	11.7	8.1***
	Subjects	75.2	52	1.4	
Error Index (Sqrt) for Block I	Expectation	1292.5	1	1292.5	6.2**
	Order	7172.7	1	7172.7	34.3***
	Expectation X Order	587.6	1	587.6	2.8*
	Subjects	10874.3	52	209.1	
Supervisor Repetitions of instructions	Expectation	37.8	1	37.8	5.8**
	Order	20.6	1	20.6	3.2*
	Expectation X Order	2.6	1	2.6	<1
	Subjects	340.4	52	6.6	

Table 3

Correlations, Experiment I

Variables (with)	Strength of Supervisor Expectation	Worker Rating of Dependence on Instruction
Time Index, Block I, "Fast" Instruction	-.45***	-.30*
Error Index, Block I, "Fast" Instruction	.31**	.18
Supervisor Repetition of Instructions	.07	-.13

* p less than .10
** p less than .05
*** p less than .01

Table 4

Worker Task Performance, Experiment II

Expectation	Draw X's Task				Mazes Task				Number Cross-out Task			
	Time		Errors		Time		Errors		Time		Errors	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
HI	155	35.9	99	63.9	40.1	26.0	43.4	39.8	347	182.3	103	270.7
NO	150	18.6	111	61.9	48.6	17.3	24.9	22.0	314	73.2	67	168.9
LO	157	40.3	114	59.3	39.3	25.6	45.8	35.6	299	145.1	188	363.2

Expectation	Loop Task							
	Time		Errors		Time Index (Log Transform)		Error Index (Sqrt Transform)	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
HI	23.1	18.6	52	31.7	16.9	2.0	45.7	20.5
NO	20.6	16.3	53	19.9	17.2	1.2	42.6	20.0
LO	20.2	13.4	58	30.4	16.6	2.3	53.5	26.4

Table 5

Summary of Analyses of Variance, Experiment II

Measure	Source	MS	DF	F
Supervisor Expectation (Manipulation check)	Among Groups	375725.8	2	343.8***
	Within Groups	1092.8	33	
Time Index (Log)	Among Groups	1.34	2	.33
	Within Groups	4.03	32	
Error Index (Sqrt)	Among Groups	367.86	2	.66
	Within Groups	553.87	32	
Supervisor Inattentiveness	Among Groups	15.53	2	2.97*
	Within Groups	5.23	33	
Worker ratings of supervisor non-directiveness	Among Groups	48273.1	2	3.79**
	Within Groups	12739.9	33	

* p less than .10
** p less than .05
*** p less than .01

Table 6

Results of t-tests, Experiment II

Variable	Comparison	Difference	SE	DF	t
Supervisor Expectation	HI>LO	353.16	13.9	22	25.5**
Supervisor Inattentiveness	HI<LO	2.25	.99	22	2.26*
Worker Ratings of Dependence on Supervisor Directions	HI>LO	102.33	44.3	22	2.31*

Table 7

Correlations, Experiment II

Variable (with)	Supervisor Expectation	Worker Rating of Supervisor Directiveness	Supervisor Rating of the "goodness" of worker performance
Time Index	.11	.20	.06
Error Index	-.13	-.03	.14
Supervisor Inattentiveness	-.29*	-.32*	.17
Supervisor Friendliness	.17	-.05	.17
Supervisor Repetition of instructions	.26	.48***	-.38**

* p less than .10
** p less than .05
*** p less than .01